## EDITORIAL

## **Plagiarism in Scientific Writing**

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In the past decade, the publishing of scientific papersespecially in the field of biomedical science-has become more and more prevalent. A primary contributor to this increase in academic activity is the speed at which knowledge can be spread with the Internet. Scientists absorb new information, design new studies and publish their experimental results in various related biomedical journals. Because of the ease of using various search engines for researching resources on the Internet, large numbers of published papers that contain an enormous amount of study materials can be quickly obtained. As such, plagiarism or duplicate publication may occur either consciously or unconsciously when the authors are preparing their manuscript. This phenomenon appears to be more often seen nowadays, and is a common issue with students as well.<sup>1</sup> According to a recent study, in a sample of 62,213 MEDLINE citations, 0.04% of cases were examples of potential plagiarism and 1.35% of cases were considered duplicate publications. After extrapolation, this corresponded to as many as 3,500 and 117,500 cases of total citations, respectively.2

The Editorial Office of the Journal of the Chinese Medical Association (JCMA) in Taipei, Taiwan, recently received two emails from Professor Garner of the University of Texas Southwestern Medical Center, Dallas, USA. Professor Garner found 2 sets of highly similar papers published in the JCMA and other journals. In the first set, the original article was published by Huo et al<sup>3</sup> from Taiwan in the *JCMA* in 2000 and the duplicate by Yuan et al<sup>4</sup> from China in the Chinese Medical Sciences Journal in 2005. After comparison, we found that the majority of the wording in the Introduction, Discussion and Tables was very similar between the 2 articles. Five (45%) out of 11 references in the latter paper were exactly the same as in the former. In the second set of papers, the original was published by Pe et al<sup>5</sup> from the US in the Archives of Ophthalmology in 1998 and the duplicate by Chen et al<sup>6</sup> from Taiwan in the *JCMA* in 2004. Again, the wording in many parts of the 2 papers was extremely similar. Additional evidence for potential plagiarism is that 18 (90%) out of 20 references in the latter paper were the same as in the former. Furthermore, in both sets of papers, the duplicate did not cite the original.

Although the definitions for plagiarism or duplicate publication may vary and "gray zones" for definitions may exist, intentional copy-editing from other papers is strongly discouraged. Oftentimes, paraphrasing another author's idea but using one's own statements together with citing the original article can help avoid the criticism of plagiarism. Many biomedical journals have policies against plagiarism and duplicate publication because such acts of misconduct should be condemned. At the JCMA, our action is to request an explanation from the authors involved and notify the head of the authors' institution when such behavior is suspected. It should be realized that while the handling editor and reviewers of a certain journal may not be aware that a submitted paper is a duplicate one, in many cases readers or researchers in bioinformatics will eventually detect such wrongdoing. Computer software programs are also currently being developed for this very purpose of detecting plagiarism and duplicate submission. The published authors may be regarded as cheaters once they are caught because plagiarism is such a serious violation of integrity and our value as scholars, and they will be punished as such.

## References

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